

Example A

Pest: Tetranychus urticae

Crop: Hops

- 5 The compound of the formula (I) (240SC) was tested at a concentration of 0.0048% a.i. in comparison with cis-cyhalothrin (050EC) at 0.005% a.i. The compound of the formula (I) was used at an early stage of the infestation of the pest, while cis-cyhalothrin was applied when the infestation had progressed to a high level.

The spray mixture (2000 l/ha) was applied using a knapsack sprayer operated with compressed air.

- 10 The plot size was 6 plants, the number of replications per test variant was 2.

The activity against spider mites was determined 4, 14 and 21 days (compound of the formula (I)) and 4, 11 and 18 days (cis-cyhalothrin) after the treatment by counting the live animals/leaf (10 leaves/plot) and calculating the efficacy using Abbott's formula.

Table

- 15 Tetranychus urticae / Hops

| Active ingredients | Concentration % a.i./ha | Efficacy in % Abbott | | | | |
|---|-------------------------------------|----------------------|-----|-----|-----|-----|
| | | 4* | 11* | 14* | 18* | 21* |
| Compound of the formula (I) (240 SC) | 0.0048 $\approx 96 \text{ g/ha}$ | 90 | | 94 | | 93 |
| Cis-cyhalothrin (050 EC) | 0.005 | 59 | 57 | | 0 | |

* Days after treatment

Example 7

Pest: Tetranychus urticae

Crop: Hops

The compound of the formula (I) (240 SC) was tested at a concentration of 0.0144% a.i. in comparison with the standard Amitraz (200 EC) at 0.05% a.i. The mixture was sprayed once.

The spray mixture (2200 l/ha) was applied using a trailed machine operated by a tractor. The plot size was 60 plants, and 2 replications were carried out per test variant.

The activity against spider mites was determined 5, 12, 19 and 34 days after the treatment by counting the live animals/leaf (60 leaves/plot) and calculating the efficacy using Abbott's formula.

10 Table B

Tetranychus urticae / Hops

| Active Ingredients | Concentration % a.i./ha | Efficacy in % Abbott | | |
|---|------------------------------|----------------------|------|------|
| | | 5* | 12* | 19* |
| Compound of the formula (I) (240 SC) | 0.0144 <i>ca. 320g/ha</i> | 89.7 | 98.1 | 99.6 |
| Amitraz (200 EC) | 0.05 | 80.1 | 96.3 | 92.2 |

* Days after treatment

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : R. Fischer et al.
Serial No. : 10/563,803
Filed : June 28, 2006
For : Use of 2,2-Dimethyl-3-(2,4-dichlorophenyl)-2-oxo1-oxaspiro[4,5]dec-3-en-4-yl Butanoate for Controlling Acarides
Group Art Unit : 161
Examiner : BROOKS, K.L.

DECLARATION UNDER 37 C.F.R. §1.132

I, Dr Robert Brinkmann, hereby declare:

- that I am an Agronomist having studied at the University of Hannover, Germany;
- that I received my doctor's degree in phytopathology at the University of Hannover, Germany in 1987;
- that I entered the employ of Bayer in 1991;
- that I am specialized in plant protection (phytopathology);
- that the following tests have been carried out under my supervision and direction

Example 3

Pest: *Tarsonemus pallidus*

Crop: Strawberries Variety: Selekt

The compound of the formula (I) (240SC) is tested with 210 g a.i./ha in comparison with Abamectin EC (020) with 23 g a.i./ha.

The spray mixture (300 l/ha) is applied with a knapsack sprayer powered with compressed air of 2 bars.

The size of the plot is 12 m² and the number of repeated applications per test variant is 3.

The activity against red spider mites is determined 5 and 12 days after treatment by counting the number of living animals per leaf and calculating the degree of activity by the Abbott method.

Tarsonemus pallidus / Strawberries

Active compounds

| | Concentration in g a.i./ha | Degree of activity in Abbott % | |
|---|-------------------------------|-----------------------------------|-----|
| | | 5* | 12* |
| Compound of the formula (I) (240 SC) | 210 | 100 | 100 |
| Abamectin EC (020) | 23 | 100 | 100 |

*days after treatment

The undersigned declarant hereby declares that all statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

15.7.2014 Bruzma
Date XX (Name)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : R. Fischer et al.
Serial No. : 10/563,803
Filed : June 28, 2006
For : Use of 2,2-Dimethyl-3-(2,4-dichlorophenyl)-2-oxo1-oxaspiro[4,5]dec-3-en-4-yl Butanoate for Controlling Acarides
Group Art Unit : 161
Examiner : BROOKS, K. L.

DECLARATION UNDER 37 C.F.R. § 1.132

I, John Bell, hereby declare:

- that I am a Pest Management Specialist having studied at Mississippi State University, USA;
- that I received my Master of Agriculture degree at Mississippi State University, USA in 1981;
- that I entered the employ of Bayer in 1982;
- that I am specialized in plant protection (phytopharmacology);
- that the following tests have been carried out under my supervision and direction

Example 4

Plots of around 32 m² with cotton of the cultivar "Maxxa" are treated in four replications against *Tetranychus urticae*. Application takes place using a tractor-operated sprayer bar, with a pressure of 50 PSI. The active ingredient of Example (I) (240 SC) is tested against the commercial standard Zephyr (EC 0.15) at the stated application rates. The water application rate is 350 l/ha.

Evaluation is made 7, 14 and 21 days after treatment, by scoring the destruction of the animals on the plants.

| Active ingredient | Application rate (g a.i./ha) | Activity (% Abbot) | | |
|-------------------|------------------------------|--------------------|------|------|
| | | 7 d | 14 d | 21 d |
| Zephyr | 11 | 31 | 73 | 89 |
| Example (I) | 150 | 0 | 15 | 58 |

Example 5

Plots of around 12 m² with cotton of the cultivar "Acala GC510" are treated in three replications against *Tetranychus urticae*. Application takes place using a tractor-operated sprayer bar, with a pressure of 60 PSI. The active ingredient of Example (I) (200 SC) is tested against the commercial standard Zephyr (BC 0.15) at the stated application rates. The water application rate is 500 l/ha.

Evaluation is made 9 days after treatment, by scoring the destruction of the animals on the plants.

| Active ingredient | Application rate (g a.i./ha) | Activity (% Abbott) |
|-------------------|------------------------------|---------------------|
| | | 9 d |
| Example (I) | 125 | 60 |
| Zephyr | 11 | 93 |

Example 6

Plots of around 32 m² with cotton of the cultivar "Maxxa" are treated in six replications against *Tetranychus urticae*. Application takes place using a tractor-operated sprayer bar, with a pressure of 50 PSI. The active ingredient of Example (I) (240 SC) is tested against the commercial standard Zephyr (EC 0.15) at the stated application rates. There are two applications, made 10 days apart.

5 The water application rate is 30 US gallons \approx about 132 l/ha.

Evaluation is made 7 days after the first treatment (1.B) and 7 and 14 days after the second treatment (2.B), by scoring the destruction of the animals on the plants.

| Active ingredient | Application rate (g a.i./ha) | Activity (% Abbott) | | |
|-------------------|------------------------------|---------------------|---------|----------|
| | | 7 d-1.B | 7 d-2.B | 14 d-2.B |
| Zephyr | 11 | 69 | 96 | 98 |
| Example (I) | 125 | 74 | 79 | 84 |

Example 8

Plots of around 10.5 m² with cotton of the cultivar "Maxxa" are treated in four replications against *Tetranychus urticae*. Application takes place using a compressed-air operated sprayer bar, with a pressure of 2 atm. The active ingredient of Example (I) (240 SC) is tested against the commercial standard Zephyr (EC 0.15) at the stated application rates. The water application rate is 350 l/ha.

- 5 Evaluation is made 14 and 21 days after treatment, by scoring the destruction of the animals on the plants.

| Active ingredient | Application rate (g a.i./ha) | Activity (% Abbott) | |
|-------------------|------------------------------|---------------------|------|
| | | 14 d | 21 d |
| Zephyr | 11 | 80 | 89 |
| Example (I) | 330 | 20 | 44 |

Example 3

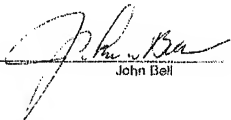
Plots of around 28 m² with cotton of the cultivar "Maxxa" are treated in four replications against *Tetranychus urticae*. Application takes place using a tractor-operated sprayer bar, with a pressure of 2.72 atm. The active ingredient of Example (I) (240 SC) is tested against the commercial standard Zephyr (EC 0.15) at the stated application rates. The water application rate is 350 l/ha.

Evaluation is made 14 days after treatment, by scoring the destruction of the animals on the plants.

| Active ingredient | Application rate (g a.i./ha) | Activity (% Abbott) |
|-------------------|------------------------------|---------------------|
| | | 14 d |
| Zephyr | 11 | 83 |
| Example (I) | 330 | 30 |

The undersigned declarant hereby declares that all statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

July 5 2011
Date


John Bell